

## **NOTICE TO BIDDERS**

**Contract # 23-37**

### **Johnson Road Improvements**

The public Bid Opening will take place at the Ionia County Administrator's office, located at 101 W. Main Street, Ionia, Michigan 48846, at **1:00 PM on Tuesday, May 2, 2023**. Sealed bids must be submitted to:

**County of Ionia  
Attn: Patrick Jordan, County Administrator  
101 West Main Street  
Ionia, Michigan 48846**

**All submissions must be received by 1:00 PM on Tuesday, May 2, 2023, and must be clearly marked: "Contract # 23-37 Johnson Road Improvements".**

The contractor shall certify that all materials and equipment meet current Michigan Department of Transportation specifications. All bids will meet or exceed the specifications established by the Ionia County Road Department and/or the Michigan Department of Transportation.

Further information upon which bids shall be based is available at the [www.ioniacountyroads.org](http://www.ioniacountyroads.org) on the "Doing Business" page or at [www.ioniacounty.org](http://www.ioniacounty.org) on the "Request for Proposals" page. The bid form is to be returned in a sealed envelope and plainly marked "Contract # 23-37 Johnson Road Improvements" and shall include the name and address of the bidder.

The County of Ionia reserves the right to reject any and all proposals or to waive irregularities therein, and to accept any proposals which, in their opinion, may be most advantageous and in the best interest of the County of Ionia.

## IONIA COUNTY ROAD DEPARTMENT

### INSTRUCTIONS TO BIDDERS

Sealed bids will be publicly opened at the Ionia County Administrator's office, located at 101 W. Main Street, Ionia, Michigan 48846.

Refer to the **NOTICE TO BIDDERS** for the exact timing and for the identification of the bids as related to furnishing materials, services, equipment, work and/or supplies with the terms, conditions, specifications, drawings, plans and special provisions as stated herein and hereto attached.

The Board's normal practice is to open and read the bids then refer the file to staff for tabulation and analysis. During this period, bid files are closed and will remain closed until presented to the Ionia County Road Department. Notifications of award, pending award, or other outcome, will be made in writing. The bid tabulation will accompany award, as is customary for item bid, or may be requested by phone at (616) 527-1700.

1. All bids must be submitted on the Board's blank form when provided. The bid shall be legibly prepared in ink or typewriter. Erasures or alterations must be initialed by the bidder.
2. Specifications and plans should not be returned unless otherwise stated herein.
3. **Bid shall be in a sealed envelope and identified on the outside as to the bid concerned.** Bids shall be mailed or delivered. Bids will NOT be accepted by fax or email.
4. Bids will not be accepted after the time designated for the opening of the bids. The bidder shall assume full responsibility for delivery of bids prior to the appointed hour for opening same and shall assume the risk of late delivery or non-delivery regardless of the manner employed for the transmission thereof. **Bids will be accepted at the County of Ionia, 101 West Main Street, Ionia** on behalf of the Board during normal business hours only, and no later than 1:00 p.m. on Tuesday May 2, 2023.
5. It is understood that the Ionia County Road Department is a governmental unit and as such, is exempt from the payment of all State and Federal taxes, except as allowed by the regulatory agencies to be included in the cost of materials and services.
6. The bidder, by execution of the bid form, thereby declares that the bid is made without collusion with any other person, firm or corporation and agrees to furnish all bid items in strict adherence with all Federal regulatory measures.
7. The County reserves the right to reject any and all bids, to waive any irregularities therein, and to accept any bid which, in the opinion of the County, may be most advantageous and to the best interest of the County. In case of error in the extension of prices in the bid or other arithmetical error, the unit prices will govern.

8. Insurance Requirements: Upon request or notification of award, and prior to execution of the contract, the contractor shall have fourteen (14) days to submit to the Ionia County Road Department a completed copy of the Certificate of Liability Insurance as evidence of the following specific requirements:

**A.** Indemnification: The contractor shall save harmless and indemnify Michigan Department of Transportation and the Ionia County Road Department as well as their officers, agents and employees, against all claims for damages to public or private property and for injuries to persons arising out of and during the progress and to the completion of the work all in accordance with the current Michigan Department of Transportation "Standard Specifications for Construction", section number 107.10.

1. CERTIFICATE HOLDER block shall read: "Ionia County Road Department, 170 E. Riverside Drive, Ionia, Michigan 48846".

2. DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS block shall read: "Additional Insured: Ionia County, and its officers, agents and employees".

**B.** Worker's Compensation Insurance: The contractor shall carry Worker's Compensation Insurance of not less than the Statutory Limit.

**C.** Bodily Injury and Property Damage: The contractor, will afford protection against all claims for damages to public or private property, and injuries to persons, arising out of and during the progress of the work, and to its completion and, where specified in the proposal, similar insurance to protect the owner of premises on or near which construction operations are to be performed.

1. **Bodily Injury and Property Damage Other Than Automobile.** Unless otherwise specifically required by special provisions in the proposal, the minimum limits of property damage and bodily injury liability covering each contract will be:

Bodily Injury and Property Damage Liability:

|                       |             |
|-----------------------|-------------|
| Each Occurrence ..... | \$1,000,000 |
| Aggregate .....       | \$2,000,000 |

The Insurance will include, but not be limited to coverage for:

- a. Underground damage to facilities due to drilling and excavating with mechanical equipment, and
- b. Collapse or structural injury to structures due to blasting or explosion, excavation, tunneling, pile driving, cofferdam work, or building moving or demolition.

2. **Bodily Injury and Property Damage Liability Automobile.** Unless otherwise specifically required by special provision, the minimum limits of bodily injury liability and property damage liability shall be:

Bodily Injury Liability:

Each Person .....\$500,000  
Each Occurrence .....\$1,000,000

Property Damage Liability:

Each Occurrence .....\$1,000,000

Combined Single Limit for Bodily Injury and Property Damage Liability:

Each Occurrence .....\$2,000,000

Comprehensive General Liability Insurance naming Ionia County, its commissioners, officers, agents and employees as “Additional Insured” is required as shown above. This policy shall also include coverage for product liability and completed operations, and bodily or property damage due to perils of explosion, collapse and underground hazards, X, C, and U. The completed certificate shall provide the name of the insurance company and its address, phone number, and fax number, in addition to the policy numbers, policy periods, policy descriptions, and signature of the insurance agent.

- D. Owner’s Protective Public Liability Insurance: In the alternative to the previous section, the contractor shall provide for and in behalf of the Ionia County, its commissioners, officials, agents and employees, and all agencies specifically named below, and their employees, a policy for Owner’s Protective Public Liability Insurance. Such insurance shall provide coverage and limits the same as the Contractor’s Public Liability Insurance.

The agencies specifically named are the Michigan Department of Transportation, Ionia County and the Ionia County Road Department.

9. **Cancellation of Contract Provisions:** Ionia County shall have the right to cancel the contract for non-performance, should an inspection by the designated representative reveal that the contractor’s work results in any non-acceptable maintenance condition of one or all specified areas. The designated representative at the time of the **first** circumstance shall call for a meeting with the contractor and issue a written warning of possible contract termination should the condition continue. If the condition should repeat for a **second** time, written notice of termination shall be sent.

10. Presumption upon Receipt of Bid: Submission of bid will be construed as a conclusive presumption that the contractor is thoroughly familiar with the bid requirements and specifications and that he/she understands and agrees to abide by each and all stipulations and requirements contained therein.
11. Contractor and Contractor's Subcontractor: Neither the Contractor nor his/her subcontractors shall discriminate against any employee or applicant for employment, to be employed in the performance of this contract, with respect to his/her hire, tenure, terms, conditions or privileges of employment because of his/her race, color, religion, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of this contract.

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**Project Schedule**

The contractor shall notify the ICRD 48 hours prior to any work being performed and shall submit a schedule upon authorization.

In no case shall any work be commenced prior to receipt of formal notice of award by the Department, or as agreed upon by the Engineer.

All work associated with the project will begin no earlier than 10 calendar days after award and be completed by October 27, 2023.

Failure to meet these deadlines will result in liquidated damages of \$800 per calendar day until the project is complete.

Questions concerning specifications may be directed to Connie Houk, P.E. at (231) 342-8480 or [chouk@preinnewhof.com](mailto:chouk@preinnewhof.com).

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**Bid Form**  
**Contract # 23-37**  
**Page 1 of 3**

| <u>Item</u>  | <u>Quantity</u> | <u>Unit</u> | <u>Unit Price</u> | <u>Total</u> |
|--|-----------------|-------------|-------------------|--------------|
| Mobilization, Max \$40,000                                     | 1               | LSUM        | \$                | \$           |
| Minor Traf Devices   | 1               | LSUM        | \$                | \$           |
| Traf Regulator Control   | 1               | LSUM        | \$                | \$           |
| HMA Base Crushing and Shaping                                  | 13,100          | Syd         | \$                | \$           |
| Ditch Grading  | 40              | Sta         | \$                | \$           |
| Trenching  | 74              | Sta         | \$                | \$           |
| Embankment, CIP  | 350             | Cyd         | \$                | \$           |
| HMA, 4EL   | 2,250           | Ton         | \$                | \$           |
| HMA Approach   | 10              | Ton         | \$                | \$           |
| Curb Slp, HMA  | 1,300           | Ft          | \$                | \$           |
| Aggregate Base   | 1,450           | Ton         | \$                | \$           |
| Approach, CI II  | 100             | Ton         | \$                | \$           |
| Shld, CI II  | 200             | Ton         | \$                | \$           |
| Maintenance Gravel, LM   | 50              | Ton         | \$                | \$           |
| Slope Restoration  | 8,200           | Syd         | \$                | \$           |
| Monument Box   | 1               | Ea          | \$                | \$           |
| Monument Preservation  | 1               | Ea          | \$                | \$           |
| Post, Mailbox  | 13              | Ea          | \$                | \$           |
| Pavt Mrkg, Wet Reflective, Type NR, Tape, 4 inch, Yellow, Temp | 592             | Ft          | \$                | \$           |
| Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp  | 592             | Ft          | \$                | \$           |
| Pavt Mrkg, Waterborne, 4 inch, White                           | 7,360           | Ft          | \$                | \$           |
| Pavt Mrkg, Waterborne, 4 inch, Yellow                          | 6,320           | Ft          | \$                | \$           |
| Lighted Arrow, Type C, Furn                                    | 2               | Ea          | \$                | \$           |
| Lighted Arrow, Type C, Oper                                    | 2               | Ea          | \$                | \$           |
| Plastic Drum, Fluorescent, Furn                                | 100             | Ea          | \$                | \$           |
| Plastic Drum, Fluorescent, Oper                                | 100             | Ea          | \$                | \$           |
| Sign, Type B, Temp, Prismatic, Furn                            | 328             | Sft         | \$                | \$           |
| Sign, Type B, Temp, Prismatic, Oper                            | 328             | Sft         | \$                | \$           |

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**Bid Form**  
**Contract # 23-37**  
**Page 2 of 3**

| <u>Item</u>                     | <u>Quantity</u> | <u>Unit</u> | <u>Unit Price</u> | <u>Total</u> |
|---------------------------------|-----------------|-------------|-------------------|--------------|
| Sign, Type III, Rem             | 1               | Ea          | \$                | \$           |
| Sign, Type III, Erect, Salv     | 1               | Ea          | \$                | \$           |
| Post, Steel, 3 pound            | 30              | Ft          | \$                | \$           |
| Driveway, Nonreinf Conc, 6 inch | 25              | Syd         | \$                | \$           |
| Pavt, Rem                       | 73              | Syd         | \$                | \$           |
| Culv, CI F, 15 inch             | 520             | Ft          | \$                | \$           |
| Sewer, CI E, 15 inch, Tr Det B  | 56              | Ft          | \$                | \$           |
| Dr Structure, 24 inch dia       | 1               | Ea          | \$                | \$           |
| Dr Structure Cover, Type G      | 1               | Ea          | \$                | \$           |
| Stump, Rem, 37 inch or larger   | 10              | Ea          | \$                | \$           |
| Stump, Rem, 19 inch to 36 inch  | 5               | Ea          | \$                | \$           |
| Culv, Rem, Less than 24 inch    | 8               | Ea          | \$                | \$           |
| Subgrade Undercutting, Type II  | 15              | Cyd         | \$                | \$           |
| <b>Total Project</b>            |                 |             |                   | <b>\$</b>    |

**Notes:**

1. Submit a Progress Schedule with the bid including the anticipated project start date, completion date, and any controlling work items.
2. Additional work, at the submitted unit prices, may be requested by the ICRD at a later date.

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**Bid Form**  
**Contract # 23-37 Johnson Road Improvements**  
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**Indemnification:** Contractor agrees to hold harmless and indemnify the Michigan Department of Transportation and the Ionia County Road Department as well as their officers, agents and employees, against all claims, suits, and judgments to which the Department, its commissioners, or employees may be subject and for all costs and actual attorney fees which may be incurred arising out of any injury to persons or damage to property, including property of the Department, whether due to negligence of the contractor or the joint negligence of the contractor and the Department, arising out of the work specified in this proposal, or in connection with work not authorized in this proposal, or resulting from failure to comply with the terms of this proposal. Contractor will not be obligated to indemnify the Ionia County Road Department for any injury or property damage arising out of the sole negligence of the Ionia County Road Department, its officers, agents, or employees.

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Authorized Signature

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Date

---

Print Name / Title

---

Phone Number

---

Company Name

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Fax Number

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Address

---

Cell Phone Number

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City, State, ZIP

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Email address

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## Appendix “A” - Project Specifications

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Owner: Ionia County Road Department, Ionia County, Michigan

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Project Title: Contract # 23-37 Johnson Road Improvements

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Project #: 2230002

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- Progress Clause
- Maintaining Traffic
- HMA Application
- Slope Restoration
- Ditch Grading
- Notice to Bidder – Pitsch Landfill

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## **PROGRESS CLAUSE**

The Engineer anticipates that construction can begin no earlier than **10 calendar days after award or as approved by the Engineer.**

In no case shall any work be commenced prior to receipt of formal notice of award by the Department.

The Contractor shall prepare and submit a complete, detailed, signed Progress Schedule to the Engineer.

The entire project must be completed within **28 calendar days**. Calendar days will be charged on the date work starts, or on the date designated as the starting date in the Progress Schedule whichever occurs earlier.

The entire project must be completed by **October 27, 2023**.

Unless specific pay items are provided in the contract any extra costs incurred by the Contractor due to cold-weather protection and winter grading will not be paid for separately but will be included in the payment of other pay items in the contract.

After award and prior to the start of work, the Contractor must attend a preconstruction meeting with the Engineer. The Engineer will determine the day, time and place for the preconstruction meeting. The meeting will be conducted after project award and may be rescheduled if there are delays in the award of the project.

The named subcontractor(s) for Designated and/or Specialty Items, as shown in the Proposal, should attend the preconstruction meeting if such items materially affect the work schedule.

Failure by the Contractor to meet final completion date will result in the assessment of liquidated damages in accordance with subsections 108.10.C.1 and 108.10.C.2 of the Standard Specifications for Construction.

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IONIA COUNTY ROAD DEPARTMENT

SPECIAL PROVISION  
FOR  
**MAINTAINING TRAFFIC**

P&N

1 of 3

1-26-2023

**a. Description.** This work shall consist of maintaining traffic for the proposed reconstruction of Johnson Road from M-44 to Wheeler Road in Orleans Township, Ionia County. This project consists of crushing and shaping the existing HMA surface, roadbed widening for shoulder upgrades, ditching, HMA paving, and pavement markings.

**b. General.** The Contractor shall maintain traffic in accordance with the standard specifications and as specified herein.

Work in the roadway will be utilizing traffic regulators, which shall be the responsibility of the Contractor. The Contractor shall be responsible for all construction signing and shall maintain through traffic and local access to residences at all times.

A single lane closure and traffic regulators, according to MDOT Maintaining Traffic Typical No. 110-TR-NFW-2L shall be used to maintain traffic.

The Contractor is responsible to move advance signing and traffic control devices throughout the project as necessary, at no additional cost to the project.

A pilot car will not be required in conjunction with this work unless desired by the Contractor, at no additional cost to the project.

The Contractor shall coordinate this work with any other contractors performing work within the Construction Influence Area or adjoining areas to avoid conflicts in the maintenance of traffic, construction signing or the orderly progress of contract work.

**c. Construction Influence Area (CIA).** The Construction Influence Area for this project shall consist of the width of the road right of way, and the width of the right of way on intersecting roads, from a point where advance construction warning signing begins to a point where it ends.

**d. Traffic Restrictions.**

A minimum of one 10 foot lane of traffic shall be maintained at all times, by a method approved by the Engineer. Each evening a two lane roadway shall be opened for traffic.

A speed reduction will be used. The work zone speed limit will be set to 45 miles per hour (MPH).

A minimum of two principal traffic regulators shall be used at each lane closure. Additional secondary traffic regulators may be required to control traffic at intersections within the lane closure. The Contractor is responsible for maintaining traffic safety within the work zone.

No work will be conducted during the following holiday periods unless otherwise approved by the Engineer:

| Holiday          | Start Date and Time                         | End Date and Time                            |
|------------------|---|--|
| Memorial Day     | 3:00 p.m. Friday, June 26 <sup>th</sup>     | 8:00 a.m. Tuesday, June 30 <sup>th</sup>     |
| Independence Day | 3:00 p.m. Friday, June 30 <sup>th</sup>     | 8:00 a.m. Wednesday, July 5 <sup>th</sup>    |
| Labor Day        | 3:00 p.m. Friday, September 1 <sup>st</sup> | 8:00 a.m. Tuesday, September 5 <sup>th</sup> |

Lane closures and work on weekends must be approved by the Engineer.

**e. Traffic Control Devices.** All signs, barricades and other traffic control devices shall be in accordance with the 2011 Michigan Manual on Uniform Traffic Control Devices (MMUTCD) and Special Detail WZD-125-E. Temporary traffic control devices shall be maintained properly as specified in the standard specifications.

Fabrication, installation, and removal of temporary signs shall be the responsibility of the Contractor and shall be included in the pay item: Sign Type B, Temp, Prismatic, Oper.

Advance signing shall be placed on driven supports only (posts driven in ground) in accordance with Special Detail WZD-100-A. Advance Signing shall be placed in accordance with MDOT Maintaining Traffic Typical 101-GEN-SPACING-CHARTS.

Following trenching operations, and until aggregate shoulders are constructed, plastic drums shall be placed along shoulder drop offs at 100 foot intervals. Shoulders shall be completed within 48 hours after completing the paving, unless otherwise approved by the Engineer.

Low Shoulder signs (W8-9 48"x48") shall also be placed at POB and POE (2 signs required) until aggregate shoulders are constructed. Signs to be paid for as Sign, Type B, Temp, Prismatic, Furn/Oper.

Yellow temporary pavement markings (Type NR Tape on leveling course and Type R Tape on top course) shall be placed on the HMA following each day of paving. Quantities for temporary tape to be placed are based on 4 inch strips, 4 foot long, spaced at 50 foot center to center for centerline. Double strips shall be placed along no passing zones. It shall be the Contractor's responsibility to ensure that all temporary pavement markings adhere to the pavement surface until permanent markings are installed.

**f. Measurement and Payment.** Payment for maintaining traffic items shall be in accordance with section 812 of the Standard Specifications for Construction, unless otherwise specified. Payment shall be based on field measured quantities. The completed work including all materials, labor, and equipment, as measured, will be paid for at the contract unit prices for the contract items (pay items).

It shall be the Contractor's responsibility to furnish, install, maintain, move and remove all traffic control devices necessary for maintaining traffic and safety within the CIA.

Additional compensation shall not be made for unused quantities for traffic control, signing and/or pavement markings items. The Maintaining Traffic pay items will be paid for at the contract unit price in accordance with the standard specification, which shall be payment in full for all labor, material, and equipment needed to accomplish this work.

Any additional signing or maintain traffic devices required to expedite the construction shall be at the Contractor's expense.

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IONIA COUNTY ROAD DEPARTMENT

SPECIAL PROVISION  
FOR  
HMA APPLICATION ESTIMATE

P&N

1 of 1

3-10-2023

**a. Description.** This work shall be done in accordance with the requirements of section 501 of the Standard Specifications for Construction except as herein specified.

**b. Materials.** The use of Reclaimed Asphalt Pavement (RAP) shall be limited to Tier 1 (0% to 17%) RAP binder by weight of the total binder in the mixture.

Design Air Voids shall be 4.0% and shall be regressed to 3.0% in production by the addition of virgin liquid asphalt.

The Minimum Fine Aggregate Angularity for any given HMA mixture shall be 40.0.

The Minimum Crush Percentage for HMA mixtures shall be 65%.

HMA, 4EL (Identity T) for Top Course, shall have a yield of 165 pounds per square yard.

HMA, 4EL (Identity L) for Leveling Course, shall have a yield of 165 pounds per square yard.

HMA Approach (Identity APP DR) shall consist of top course of HMA, 4EL, having a yield of 220 pounds per square yard, for driveway approaches.

The Aggregate Wear Index for all top course applications shall be a minimum of 220.

The Performance Grade Asphalt Binder Range for the Mixture shall be 58-28.

The HMA Bond Coat material shall be per subsection 501.03. The uniform rate of application shall be 0.05 to 0.15 gallons per square yard. This is for information only and is included in the cost of HMA.

**c. Construction Methods.** MDOT Special Provision 20SP-501I series shall apply for sampling and testing requirements.

**d. Measurement and Payment.** Measurement and Payment shall be at the contract unit price for the related items of work.

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IONIA COUNTY ROAD DEPARTMENT

SPECIAL PROVISION  
FOR  
SLOPE RESTORATION

P&N

1 of 2

5-23-2022

**a. Description.** This work shall consist of all labor, equipment, and materials required to provide turf establishment items (topsoil, fertilizer, seed, and mulch) on disturbed areas and newly graded surfaces of the project.

**b. Construction Methods.** Slope Restoration shall include, but is not limited to, the following work: preparing foundation soils, furnishing, placing and grading topsoil, fertilizing, seeding, and placing mulch anchoring.

Unless otherwise specified herein or otherwise directed by the Engineer, all work shall be in accordance with sections 816 and 917 of the Standard Specifications for Construction and Standard Plan R-100 Series.

Application rates for the various materials shall be as follows:

|  |                     |
|--|---------------------|
| Topsoil Surface, salvaged or furnished | 4 inches minimum    |
| Seeding Mixture, TDS                   | 220 pounds per acre |
| Fertilizer, Chemical Nutrient, CI A    | 176 pounds per acre |
| Mulch                                  | 2 tons per acre     |

The supplier's certification that the above items meet the specifications will be required.

Hay Mulch will not be permitted unless otherwise directed by the Engineer.

All generated waste shall be disposed of in accordance with subsection 205.03 of the Standard Specifications for Construction at the Contractor's expense.

Construction methods must be in accordance with subsection 816.03 of the Standard Specifications for Construction. Begin this work as soon as possible after final grading of the areas designated for slope restoration but no later than the maximum time frames stated in subsection 208.03 of the Standard Specifications for Construction. It may be necessary, as directed by the Engineer, to place materials by hand.

Shape, compact and assure all areas to be seeded are weed free prior to placing topsoil. Place topsoil to the minimum depth indicated above, to meet proposed finished grade. If the area being restored requires more than the minimum depth of topsoil to meet finished grade, this additional depth must be filled using topsoil or, at the Contractor's option, embankment. Furnishing and placing this additional material is included in this item of work.

Topsoil must be weed and weed seed free and friable prior to placing seed. Remove any stones greater than 1/2 inch in diameter or other debris. Apply seed mixture and fertilizer to prepared soil surface. Incorporate seed into top 1/2 inch of topsoil.

Apply mulch at a rate of 2 tons per acre. Place Mulch Anchoring over the mulch at a rate specified in subsection 816.03.F of the Standard Specifications for Construction.

If an area washes out after this work has been properly completed and approved by the Engineer, make the required corrections to prevent future washouts and replace the topsoil, fertilizer, seed and mulch. This replacement will be paid for as additional work using the applicable contract items.

If an area washes out for reasons attributable to the Contractor's activity or failure to take proper precautions, replacement will be at the Contractor's expense.

The Engineer will inspect the seeded turf to ensure the end product is well established, weed free, in a vigorous growing condition, and contains the species called for in the seeding mixture.

If the seeded turf is not well established at time of final project acceptance, the Contractor is responsible to re-seed until the turf is well established and approved by the Engineer.

If weeds are determined by the Engineer to cover more than 10 percent of the total area of slope restoration, the Contractor must provide weed control in accordance with subsection 816.03.I of the Standard Specifications for Construction. Weed control will be at the Contractor's expense with no additional charges to the project.

**c. Measurement and Payment.** The completed work as measured for Slope Restoration will be paid for at the contract unit price for the following pay item:

**Pay Item**

Slope Restoration

**Pay Unit**

Square Yard

The Contractor is responsible to restore any areas disturbed due to staging or other construction operations, at no additional cost to the project.

IONIA COUNTY ROAD DEPARTMENT

SPECIAL PROVISION  
FOR  
DITCH GRADING

P&N

1 of 1

03-07-23

**a. Description.** This work consists of all earth excavation and embankment needed to reshape, or move ditches as required in areas. Positive drainage must be maintained.

This work also includes disposing of excess or unsuitable materials if any.

**b. Materials.** If additional embankment is required, furnish sound earth or other suitable material approved by the Engineer.

**c. Construction.** Complete this work in accordance with section 205 of the Standard Specifications for Construction, the details shown on the plans and this special provision. Dispose of excess or unsuitable material in accordance with subsection 205.03.P of the Standard Specifications for Construction.

In addition to the items listed in subsection 205.03.J of the Standard Specifications for Construction, the work includes, but is not limited to, the following:

1. Strip topsoil.
2. Reshape or move existing ditch.
3. Grade new ditches to maintain drainage.

Excavated earth may be used to as embankment in fill areas, as approved by the Engineer.

**d. Measurement and Payment.** The completed work, as described, will be measured and paid for at the contract unit price using the following pay item:

**Pay Item**

**Pay Unit**

Ditch Grading .....Station

**Ditch Grading** will be measured along the road surface edge. The Engineer will measure each side of the road where work is performed, separately.

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## ***NOTICE TO BIDDER – PITSCH LANDFILL***

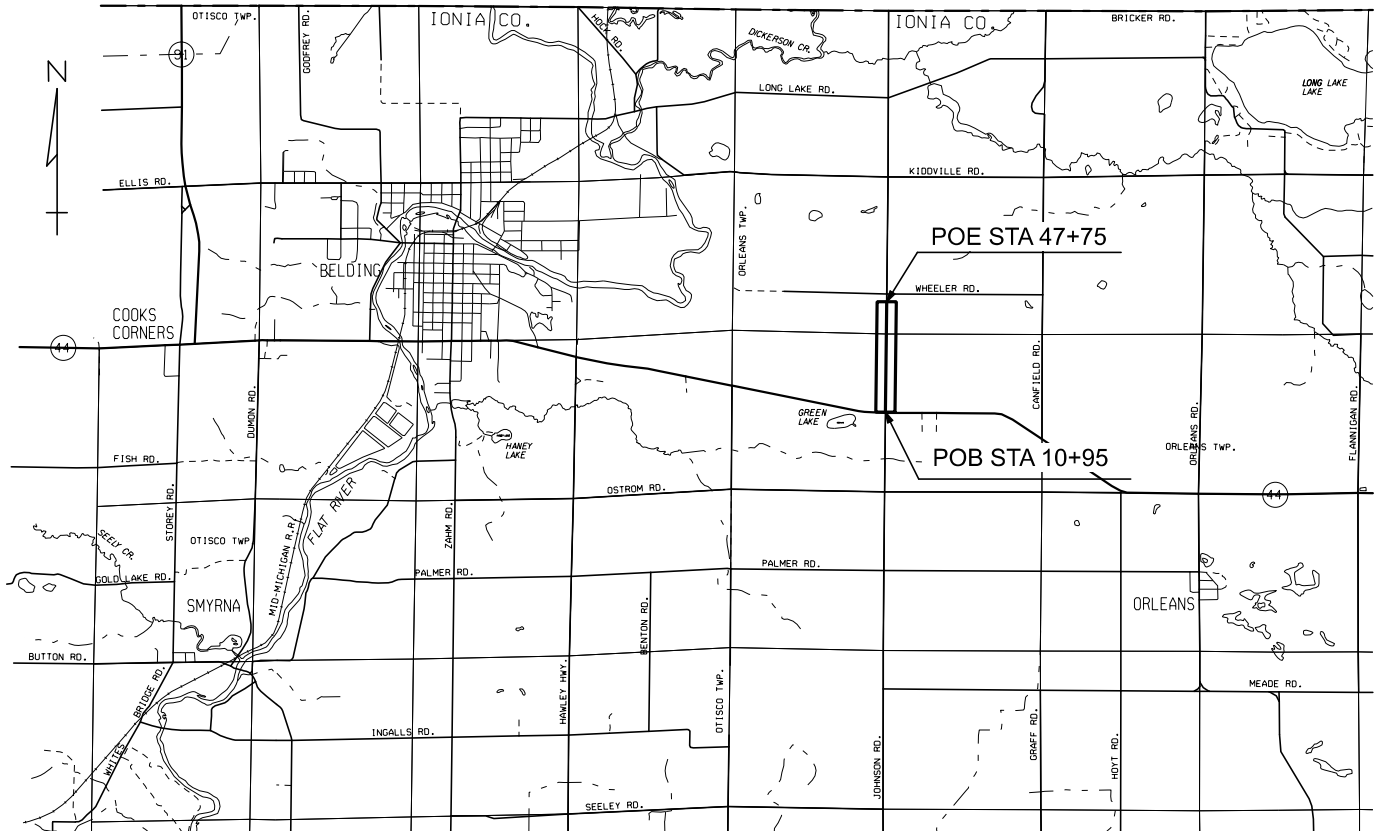
Pitsch Landfill will accept all excess roadbed material, embankment, ditch material, trees, brush, stumps, and culverts from **this** job at no cost the Contractor.

The landfill is located approximately  $\frac{3}{4}$  mile north of the project on Johnson Road. Contractor will be responsible for coordination and hauling of materials to the landfill.

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# IONIA COUNTY ROAD DEPARTMENT

## PLANS FOR JOHNSON ROAD IMPROVEMENTS



PLACING OF TRAFFIC CONTROL ITEMS SHALL BE DONE IN ACCORDANCE WITH THE 2011 EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MDOT 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION AS AMENDED BY SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS.

### TRAFFIC DATA

ADT 2023 = 838  
ADT 2043 = 925  
COMMERCIAL = 10%  
STATUTORY SPEED = 55 mph  
DESIGN SPEED = 55 mph

PREPARED UNDER SUPERVISION OF

CONNIE S. HOUK, P.E. 6201039657  
REGISTERED PROFESSIONAL ENGINEER REG. NO.

PREIN&NEWHOF  
ORGANIZATION

100 E. CHAPIN ST. SUITE A, CADILLAC, MI 49601  
ADDRESS

**Prein&Newhof**  
Engineers ■ Surveyors ■ Environmental ■ Laboratory

PROJECT LENGTH: 0.70 MILES  
PROJECT DESCRIPTION: HMA CRUSHING AND SHAPING, SHOULDER UPGRADES, DITCHING, TWO COURSE HMA PAVING, PAVEMENT MARKINGS AND SIGNING ON JOHNSON ROAD, IN ORLEANS TOWNSHIP, IONIA COUNTY.

COUNTY ROAD DEPARTMENT APPROVAL

JOHN NIEMELA - MANAGING DIRECTOR

DATE

# **JOHNSON ROAD IMPROVEMENTS**

## **IONIA COUNTY**

*from M-44 to Wheeler Road  
in Orleans Township, Ionia County*

### **DESCRIPTION OF WORK**

This project consists of crushing and shaping the existing HMA surface, roadbed widening for shoulder upgrades, ditching, and HMA paving. This project also includes permanent pavement markings and maintaining traffic items.

Project length is 0.70 miles from M-44 to just south Wheeler Road.

### **STANDARD PLANS & SPECIAL DETAILS**

Where the following items are called for, they are to be constructed according to the Standard Plan or Special Detail listed below unless otherwise indicated.

#### **Road Standard Plans:**

|        |   |
|--------|---|
| R-1-G  | Drainage Structures                                   |
| R-11-E | Monument Boxes  |
| R-12-E | Cover G   |
| R-29-I | Driveway Openings & Approaches and Concrete Sidewalks |
| R-74-D | Bumper & Parking Rails and misc. Wood Posts           |
| R-82-D | Bedding and Filling around Pipe Culverts              |
| R-83-C | Utility Trenches                                      |
| R-96-E | Soil Erosion & Sedimentation Control Measures         |

#### **Pavement Marking Standards:**

|            |                                       |
|------------|---------------------------------------|
| PAVE-905-E | Longitudinal Line Types and Placement |
|------------|---------------------------------------|

#### **Traffic & Safety Work Zones Special Details:**

|           |  |
|-----------|--|
| WZD-100-A | Ground Driven Sign Supports For Temp Signs |
| WZD-125-E | Temporary Traffic Control Devices          |



### **CRITICAL STATIONING**

The stationing used in this log is assumed based aerial imagery and limited field measurements topo. The Contractor shall field verify all dimensions and notify the Engineer if any discrepancies are found.

The construction centerline is the physical centerline of the existing road.

|                  |  |
|------------------|--|
| Sta 10+00        | M-44 centerline  |
| <b>Sta 10+95</b> | <b>POB – sawcut existing full width pavement</b><br>(at end of existing Curb and Gutter) |
| Sta 11+85        | HMA Drive with Proposed Storm Drain  |
| Sta 12+00        | Begin Proposed Sloped Curb LT&RT   |
| Sta 18+50        | End Proposed Sloped Curb LT&RT   |
| Sta 43+58        | Concrete Driveway Replacement  |
| <b>Sta 47+75</b> | <b>POE – sawcut existing full width pavement</b>   |
| Sta 49+50        | Wheeler Road centerline  |

### **SOIL INVESTIGATION AND/OR PAVEMENT CORES**

The soil investigation logs and/or pavement cores represent point information. No inference should be made that subsurface or pavement conditions are the same at other locations.

Soil investigations were performed throughout the project. Results indicated an existing section of approximately:

3" HMA  
5" Aggregate base

**MAINTAINING TRAFFIC**

Traffic shall be maintained through the project using traffic regulators according to MDOT Maintaining Traffic Typical No. 110-TR-NFW-2L and the Maintaining Traffic Special Provision.

|  |            |             |
|--|------------|-------------|
| <b>Minor Traf Devices</b>                  | <b>1</b>   | <b>LSUM</b> |
| <b>Traf Regulator Control</b>              | <b>1</b>   | <b>LSUM</b> |
| <b>Lighted Arrow, Type C, Furn</b>         | <b>2</b>   | <b>Ea</b>   |
| <b>Lighted Arrow, Type C, Oper</b>         | <b>2</b>   | <b>Ea</b>   |
| <b>Plastic Drum, Fluorescent, Furn</b>     | <b>100</b> | <b>Ea</b>   |
| <b>Plastic Drum, Fluorescent, Oper</b>     | <b>100</b> | <b>Ea</b>   |
| <b>Sign, Type B, Temp, Prismatic, Furn</b> | <b>328</b> | <b>Sft</b>  |
| <b>Sign, Type B, Temp, Prismatic, Oper</b> | <b>328</b> | <b>Sft</b>  |

**MISCELLANEOUS ITEMS OF WORK**

The following items shall be used as they apply throughout the entire project.

|                                       |            |             |
|---------------------------------------|------------|-------------|
| <b>Mobilization, Max</b>              | <b>1</b>   | <b>LSUM</b> |
| <b>Monument Box</b>                   | <b>1</b>   | <b>Ea</b>   |
| <b>Monument Preservation</b>          | <b>1</b>   | <b>Ea</b>   |
| <b>Post, Mailbox</b>                  | <b>13</b>  | <b>Ea</b>   |
| <b>Embankment, CIP</b>                | <b>350</b> | <b>Cyd</b>  |
| <b>Stump, Rem, 19 inch to 36 inch</b> | <b>5</b>   | <b>Ea</b>   |
| <b>Stump, Rem, 37 inch or Larger</b>  | <b>10</b>  | <b>Ea</b>   |
| <b>Maintenance Gravel, LM</b>         | <b>50</b>  | <b>Ton</b>  |
| <b>Subgrade Undercutting, Type II</b> | <b>15</b>  | <b>Cyd</b>  |

## **PROPOSED IMPROVEMENTS**

### **Trenching / Ditch Grading**

Prior to mainline crushing, the shoulder portion of the roadbed shall be excavated to a depth of 6 inches below the edge of existing HMA and shall be widened as shown on the Existing Typical Section. As necessary to maintain drainage and facilitate driveway culvert placement, new or relocated ditches shall be constructed as shown on the Proposed Crush & Shape Section.

Trenched material may be used as embankment at proposed fills, as approved by the Engineer. All excess or unsuitable material generated shall become the property of the contractor and shall be disposed of in accordance with subsection 205.03 of the Standard Specifications for Construction at the Contractor's expense.

### **Crushing and Shaping**

Approximately 3 inches of additional aggregate, paid as Aggregate Base, shall then be spread on the existing HMA surface (22'+/- width) and crushed along with the existing pavement to create a homogeneous mixture. The existing pavement section shall be crushed to a depth of 9 inches (including the additional 3 inches of new aggregate). The crushed material shall be spread, shaped, and resurfaced with HMA as shown on the Proposed Crush & Shape Section.

The new HMA surface will be approximately 3 inches higher than the existing surface.

Matching the existing HMA at the POB and POE shall be done at a straight clean joint created by saw cut or approved method. The crushed material shall be graded to provide a smooth transition (100' minimum taper from the existing HMA to the proposed pavement crown point elevation). All cost associated with saw cutting and grading throughout this project is considered included in payment for HMA Base Crushing and Shaping.

Class II shoulders shall be constructed as shown on the typical section.

|                                      |               |            |
|--------------------------------------|---------------|------------|
| <b>Ditch Grading</b>                 | <b>40</b>     | <b>Sta</b> |
| <b>Trenching</b>                     | <b>74</b>     | <b>Sta</b> |
| <b>Aggregate Base</b>                | <b>1,430</b>  | <b>Ton</b> |
| <b>HMA Base Crushing and Shaping</b> | <b>13,100</b> | <b>Syd</b> |
| <b>HMA, 4EL</b>                      | <b>2,250</b>  | <b>Ton</b> |
| <b>Shld, CI II</b>                   | <b>200</b>    | <b>Ton</b> |
| <b>Slope Restoration</b>             | <b>8,200</b>  | <b>Syd</b> |
| <b>Curb Slp, HMA</b>                 | <b>1300</b>   | <b>Ft</b>  |

**Driveway Improvements**

Driveways shall be improved as shown on the Detail sheets. All approaches shall be treated on a case by case basis, and the limits of work may be adjusted, as required for culverts or directed by the Engineer.

Concrete surfaced driveway (Sta 43+58) shall be saw cut, removed, excavated (included in other items) to provide 6 inches of Aggregate Base, and shall be paved with Driveway, Nonreinf Conc, 6 inch.

HMA surfaced driveways shall be saw cut, excavated (included in other items) to provide 6 inches of Aggregate Base, and shall be paved with a single course of HMA, 4EL (paid for as HMA Approach).

Gravel driveway approaches shall be graded with additional Class II aggregate. Proposed material shall be feathered out over entire distance to match the proposed shoulder surface, or within length as otherwise directed by the Engineer.

Existing Culverts shall be removed and replaced with Class F culverts as directed. The Engineer may add new Class F Culverts at locations not previously having one.

The existing concrete culvert at Station 24+35 +/- shall be salvaged and re-used at the same drive.

All excess or unsuitable material generated during driveway work shall become the property of the contractor and shall be disposed of in accordance with subsection 205.03 of the Standard Specifications for Construction at the Contractor's expense.

|  |            |            |
|--|------------|------------|
| <b>Culv, CI F, 15 inch</b>             | <b>520</b> | <b>Ft</b>  |
| <b>Dr Structure, 24 inch dia</b>       | <b>1</b>   | <b>Ea</b>  |
| <b>Dr Structure Cover, Type E</b>      | <b>1</b>   | <b>Ea</b>  |
| <b>Sewer, CI E, 15 inch, Tr Det B</b>  | <b>56</b>  | <b>Ft</b>  |
| <b>Culv, Rem, Less than 24 inch</b>    | <b>8</b>   | <b>Ea</b>  |
| <b>Aggregate Base</b>                  | <b>20</b>  | <b>Ton</b> |
| <b>Approach, CI II</b>                 | <b>100</b> | <b>Ton</b> |
| <b>HMA Approach</b>                    | <b>10</b>  | <b>Ton</b> |
| <b>Driveway, Nonreinf Conc, 6 inch</b> | <b>25</b>  | <b>Syd</b> |
| <b>Pavt, Rem</b>                       | <b>73</b>  | <b>Syd</b> |

**PAVEMENT MARKINGS**

The Contractor shall install temporary pavement markings at centerline following each day of paving, in accordance with section 812 of the Standard Specifications for Construction.

Quantities for temporary tape to be placed are based on 4 inch strips, 4 foot long, spaced at 50 foot center to center. Double strips shall be placed in no passing zones. It shall be the Contractor's responsibility to ensure that all temporary pavement markings adhere to the pavement surface until permanent markings are installed.

All permanent pavement markings, shapes, and dimensions shall conform to the MDOT Pavement Marking standard plans and special details.

Proposed edge lines (11 foot offset from centerline) shall be painted at a 4 inch width.

| <b>STATION FROM</b> | <b>STATION TO</b> | <b>CENTERLINE MARKING</b> | <b>NO PASSING:</b>      |
|---------------------|-------------------|---------------------------|-------------------------|
| 10+95               | 29+79             | Double Solid              | Northbound & Southbound |
| 29+79               | 40+17             | Solid / Skip              | Southbound              |
| 40+17               | 44+25             | Double Solid              | Northbound & Southbound |
| 44+25               | 47+75             | Skip / Solid              | Northbound              |

|   |              |           |
|---|--------------|-----------|
| <b>Pavt Mrkg, Wet Reflective, Type NR, Tape, 4 inch, Yellow, Temp</b> | <b>592</b>   | <b>Ft</b> |
| <b>Pavt Mrkg, Wet Reflective, Type R, Tape, 4 inch, Yellow, Temp</b>  | <b>592</b>   | <b>Ft</b> |
| <b>Pavt Mrkg, Waterborne, 4 inch, White</b>                           | <b>7,360</b> | <b>Ft</b> |
| <b>Pavt Mrkg, Waterborne, 4 inch, Yellow</b>                          | <b>6,320</b> | <b>Ft</b> |

**SIGNS**

All signs requiring relocation due to construction operations shall be salvaged and carefully protected to not damage the sign face. The signs will be reset by the Contractor, on new posts, at the location designated by the Engineer.

|                                    |           |           |
|------------------------------------|-----------|-----------|
| <b>Sign, Type III, Rem</b>         | <b>1</b>  | <b>Ea</b> |
| <b>Sign, Type III, Erect, Salv</b> | <b>1</b>  | <b>Ea</b> |
| <b>Post, Steel, 3 lb</b>           | <b>30</b> | <b>Ft</b> |

## **GENERAL NOTES**

### **MISS DIG/UNDERGROUND UTILITY NOTIFICATION**

For the protection of underground utilities and in conformance with MCL 460.171 et seq, the Contractor shall contact MISS DIG System, Inc. by phone at 811 or 800-482-7171 or via the web at either [missdig811.org](http://missdig811.org) a minimum of 3 work days prior to excavating, excluding weekends and holidays.

### **ADJUSTING MONUMENT BOXES**

All government corners on this project shall be preserved, whether shown or not. It may be necessary to place or adjust monument boxes, as required.

### **SOIL EROSION MEASURES**

Appropriate soil erosion and sedimentation control measures shall be in place prior to earth-disturbing activities. Place turf establishment items as soon as possible on potential erodible slopes as directed by the Engineer.

### **AGGREGATE BASE**

Aggregate bases shall use aggregate 22A, unless otherwise specified.

### **MAILBOXES**

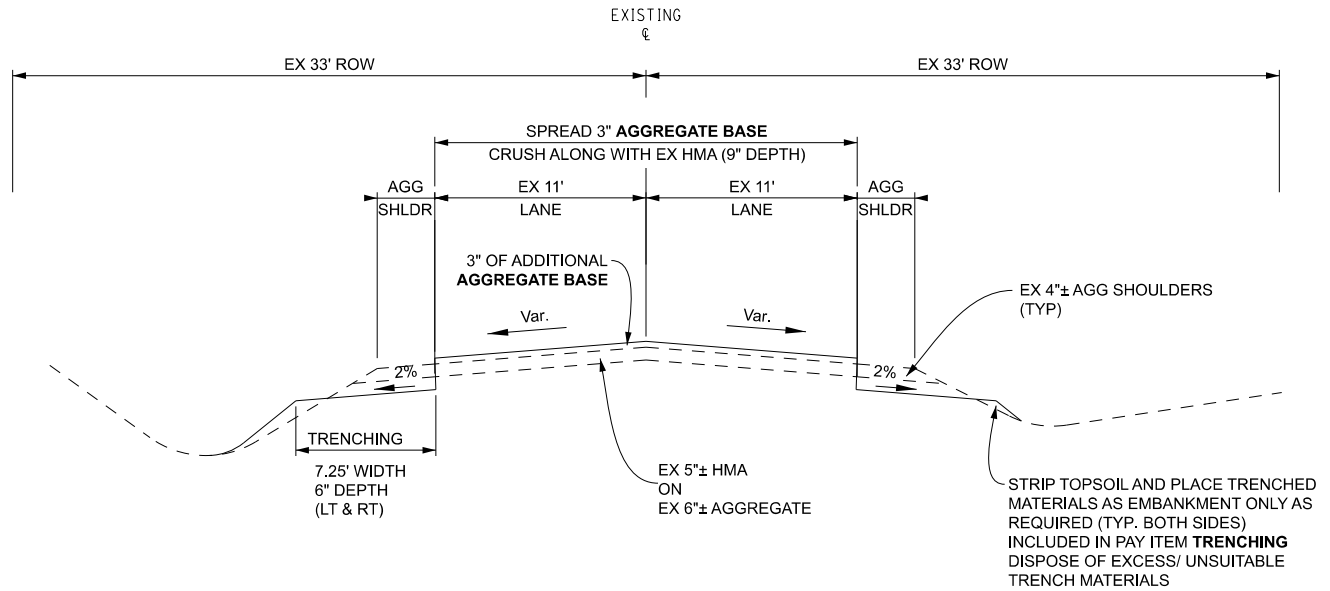
Mailboxes shall be relocated if they hinder proposed work. Prior to relocating any mailbox, the local post office shall be consulted by the Contractor to determine the best location for a temporary location. All affected residents must be notified prior to relocating their mailbox. All moved mailboxes shall be replaced to their original locations by the Contractor.

### **SITE CLEANUP**

The Contractor shall keep the work site clean of trash and other debris. At the end of each workday, the project shall be inspected, and all trash removed. No payment shall be made for this work.

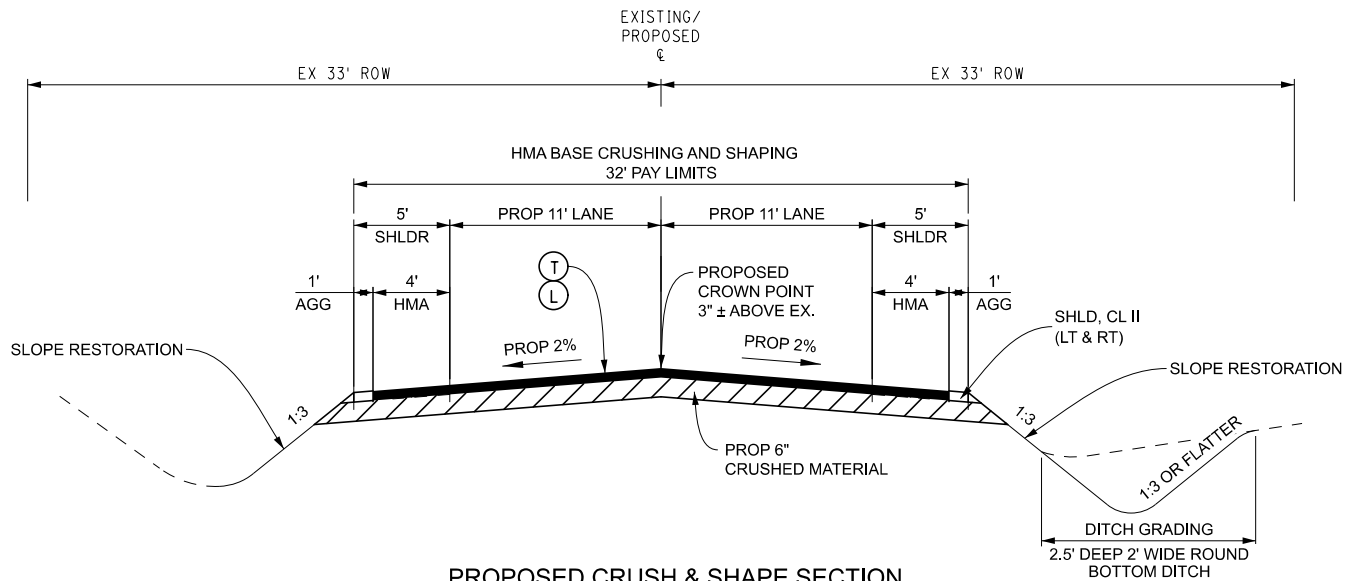
### **PITSCH LANDFILL**

Pitsch Landfill will accept all excess roadbed material, embankment, ditch material, trees, brush, stumps, and culverts from this job at no cost the Contractor. Contractor will be responsible for hauling to the landfill.



### EXISTING TYPICAL SECTION

TO APPLY: POB STA 10+95 TO STA 47+75

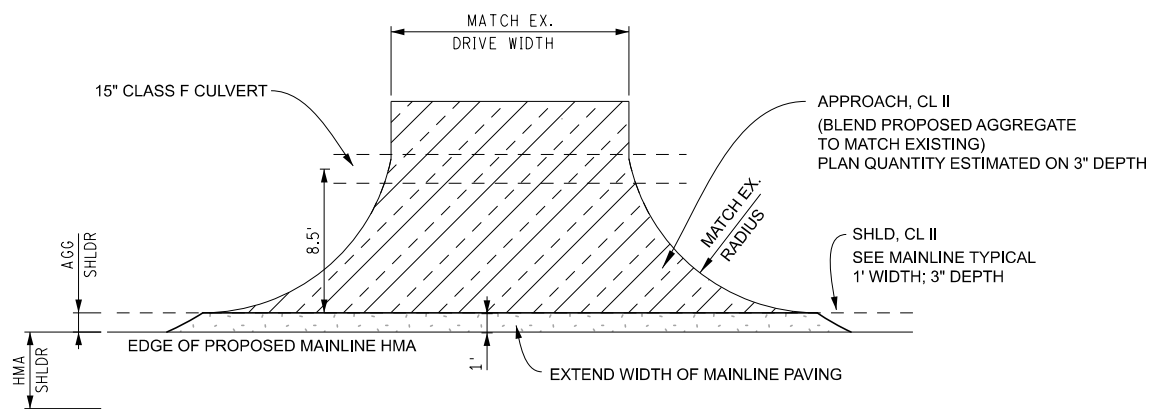
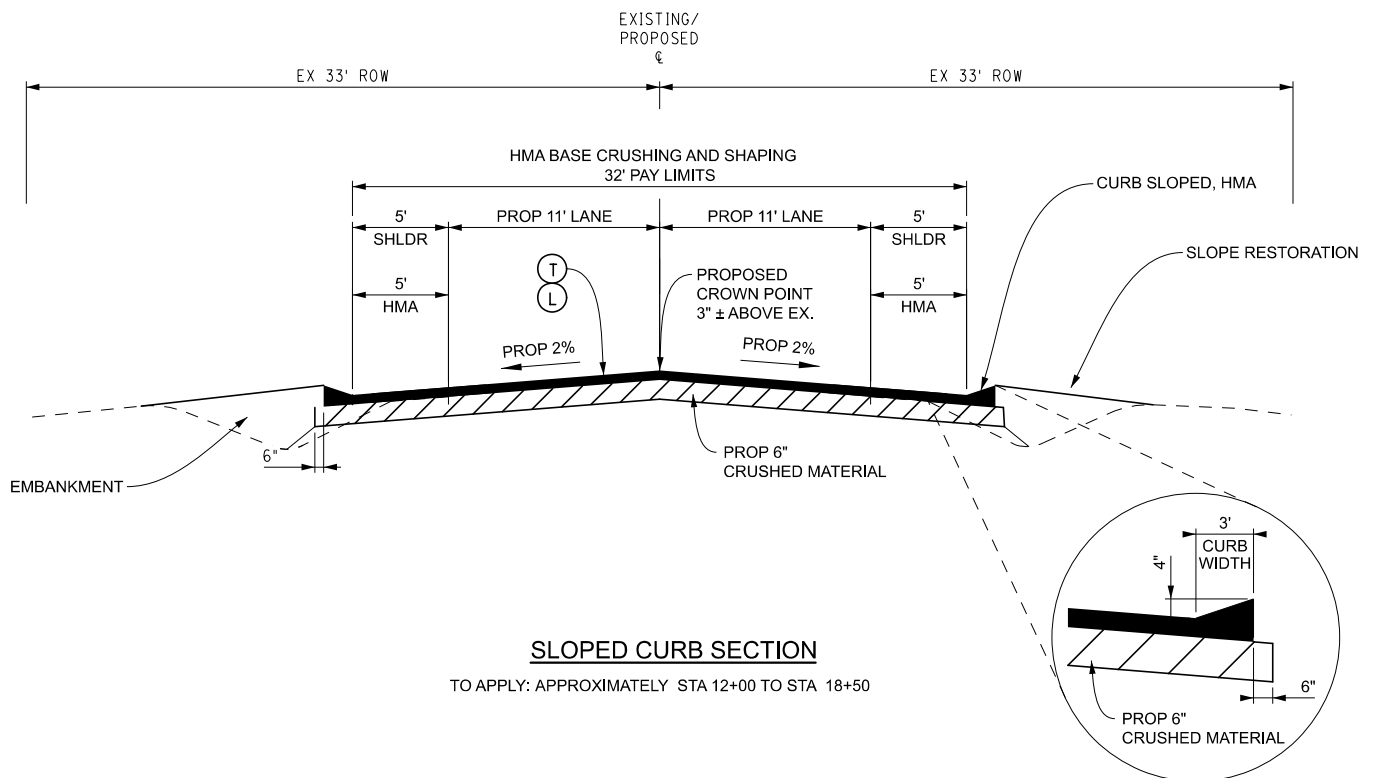


### PROPOSED CRUSH & SHAPE SECTION

TO APPLY: POB STA 10+95 TO STA 12+00  
STA 18+50 TO POE STA 47+75

### HMA APPLICATION ESTIMATE

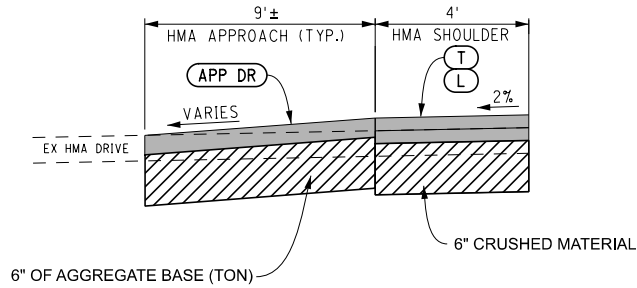
| IDENT. No. | ITEM          | RATE: lbs/syd     | PERFORMANCE GRADE | REMARKS                                 |
|------------|---------------|-------------------|-------------------|---|
| T          | HMA, 4EL      | 165               | 58-28             | TOP COURSE AWI=220 MIN.                 |
| L          | HMA, 4EL      | 165               | 58-28             | LEVELING COURSE                         |
| APP DR     | HMA APPROACH  | 220               | 58-28             | SINGLE COURSE OF HMA, 4EL FOR DRIVEWAYS |
|            | HMA BOND COAT | 0.05-0.15 gal/syd |                   | FOR INFORMATION ONLY                    |



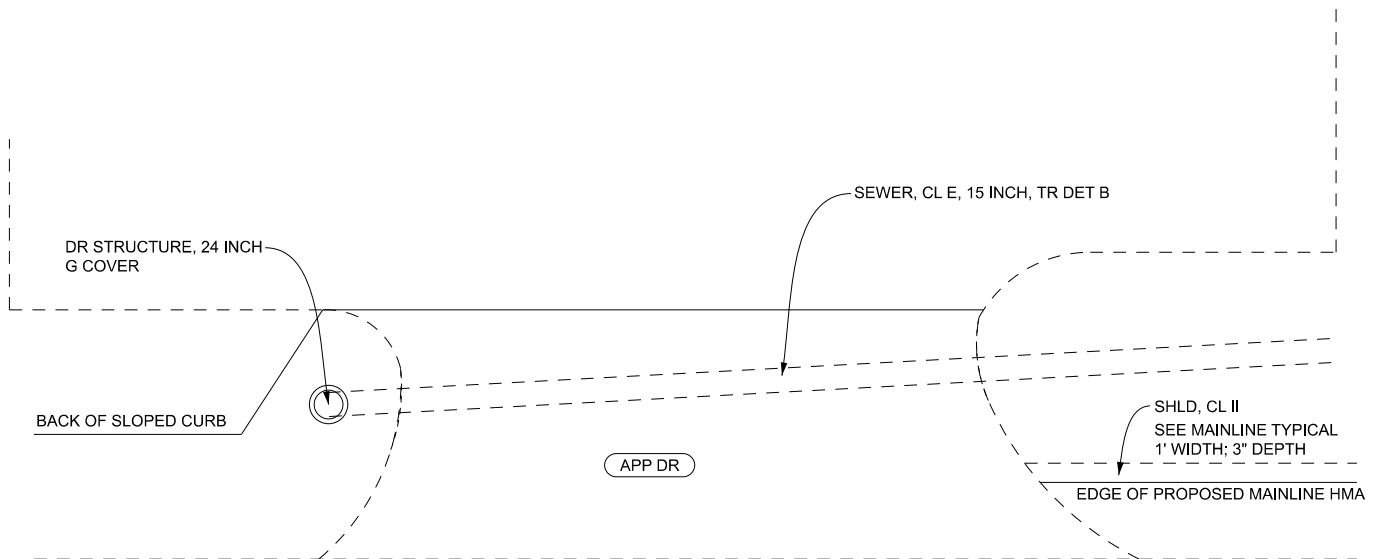
**GRAVEL DRIVE DETAIL**

NOTE: SHALL ALSO APPLY TO FIELD DRIVES WHERE DIRECTED BY ENGINEER.



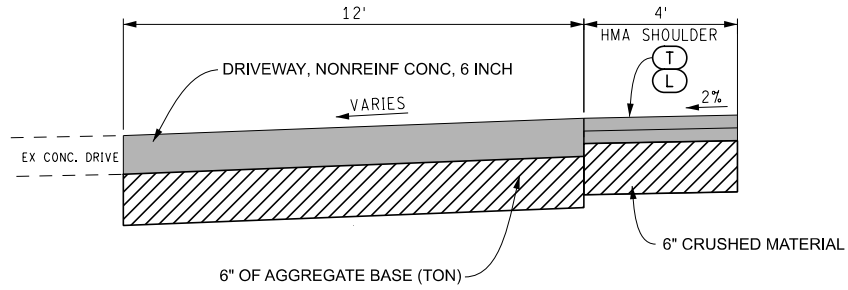


HMA DRIVE AND SECTION

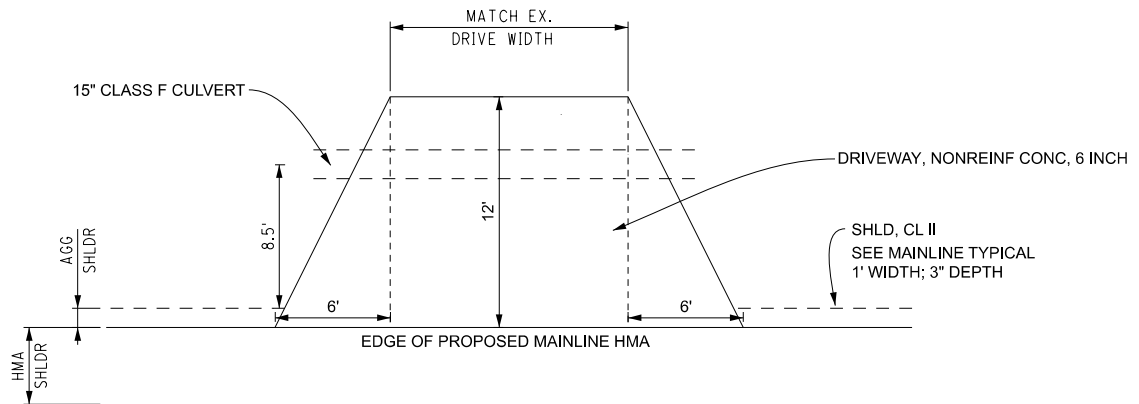


HMA DRIVE AND STORM DRAINAGE DETAIL

STA: 11+85 RT



CONCRETE DRIVE SECTION



CONCRETE DRIVE DETAIL

STA: 43+58 RT